

WHAT IS CLAIMED IS:

1. A solid surface material fabrication station for fabricating a solid surface material, the fabrication station comprising:

- 5 a support wall;
 - a plurality of spaced-apart supports that extend from the support wall and define a solid surface support for supporting the solid surface material to be fabricated such that the solid surface material to be fabricated extends at least across two of the supports so as to define a region beneath the solid surface to be fabricated extending from the floor to the solid surface material to be fabricated and a region above the solid surface material to be fabricated corresponding to a region where a worker's face will ordinarily be while working on the solid surface material to be fabricated;
 - 15 a plurality of spaced heat supply units located below the solid surface support, each of the heat supply units being positioned so as to selectively heat a portion of the surface of the solid surface material to be fabricated, and the heat supply units being switchable on and off independently of other heat supply units;
 - 20 an air exhaust chamber connected to a source of air suction and a plurality of air exhaust vents spaced along the length of the fabrication station for drawing air from the vicinity of the solid surface material being fabricated into the air exhaust chamber, the air exhaust vents being located above, but near the surface of the solid surface material to be fabricated;
 - 25 a ventilation air intake chamber and a plurality air intake vents located above the air intake vents for discharging ventilation air from the ventilation air intake chamber;

wherein the air intake vents are located relative to the exhaust vents so as to create a circulating air barrier between the face of a fabricator working on the solid surface material to be fabricated and the surface of the solid surface material to be fabricated.

5 2. The fabrication station of claim 1, further comprising a track secured to the support wall; and

wherein the plurality of spaced-apart supports comprise a plurality of supports that are slidably mounted within the track along the support wall, each of the supports comprising a slat support channel portion having one end slidably received within

10 the track and a removable slat portion that is supported by the slat support channel portion but is extensibly movable toward and away from the support wall relative to the slat support channel portion.

15 3. The fabrication station of claim 2, further comprising an adjustable support that supports each slat support channel portion so that the position of the slat support channel portions is adjustable relative to the support wall and one another to provide a fine adjustment.

20 4. The fabrication station of claim 2, further comprising removable slat portions of different sizes and shapes that can be supported within the slat support channel portion so that the supports are adjustable to accommodate different shapes of solid surface material to fabricated.

5. The fabrication station of claim 4, wherein the removable slat portion has an angled upper surface.

6. The fabrication station of claim 4, wherein the removable slat portion includes a plurality of spaced holes.

25 7. The fabrication station of claim 4, wherein the removable slat portion includes a clamp.

8. The fabrication station of claim 4, wherein the removable slat portion includes a hook.

9. The fabrication station of claim 4, wherein the removable slat portion includes a longitudinal groove.

5 10. The fabrication station of claim 9, wherein the removable slat portion supports a longitudinal slat within the longitudinal groove.

11. The fabrication station of claim 1, further comprising a base from which the support wall extends and wheels connected to the base to allow the base to roll.

10 12. The fabrication station according to claim 2, wherein the removable slat portion of the supports is made from a sacrificial material such that at least a portion of the solid surface material to be fabricated is supported on a support that can be cut with solid surface fabricating tools during the fabrication process without damaging the tools.

15 13. The fabrication station of claim 1, further comprising a plurality of spaced-apart supports that extend from the support wall on each side of the support wall so as to provide fabrication stations on both sides of the support wall.

20 14. The fabrication station of claim 13, wherein the fabrication stations on each side of the support wall include a plurality of spaced heat supply units located below the solid surface support; an air exhaust chamber connected to a source of air suction; and ventilation air intake chamber.

25 15. The fabrication station of claim 14, wherein the air exhaust chambers communicate with one another and the ventilation air intake chambers communicate with one another.

16. The fabrication station of claim 1, further comprising a table saw mounted on a support that can be swung from a substantially horizontal position to a storage position.

5 17. The fabrication station of claim 1, wherein the air exhaust chambers comprise a plenum secured to the support wall.

10 18. The fabrication station of claim 17, further comprising utility connections prewired into the air exhaust plenum prior to attachment to the support wall.

19. The fabrication station of claim 1, wherein the air intake chambers comprise a plenum secured to the support wall.

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20. The fabrication station of claim 1, wherein the heat supply chambers comprise a plenum secured to the support wall.

21. The fabrication station of claim 1, further comprising a timer switch 20 for switching the heat supply units on and off independently of other heat supply units.

22. The fabrication station of claim 1, further comprising a photoelectric switch for selectively opening and closing the exhaust vents.

25 23. A solid surface material fabrication station for fabricating a solid surface material, the fabrication station comprising:
a support wall;

a plurality of spaced-apart supports that extend from the support wall and define a solid surface support for supporting the solid surface material to be fabricated such that the solid surface material to be fabricated extends at least across two of the supports so as to define a region beneath the solid surface to be
5 fabricated extending from the floor to the solid surface material to be fabricated and a region above the solid surface material to be fabricated corresponding to a region where a worker's face will ordinarily be while working on the solid surface material to be fabricated;

a track secured to the support wall, wherein the plurality of spaced-apart supports comprise a plurality of supports that are slidably mounted within the track along the support wall, each of the supports comprising a slat support channel portion having one end slidably received within the track and a removable slat portion that is supported by the slat support channel portion but is extensibly movable toward and away from the support wall relative to the slat support channel
10 portion; and
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a plurality of spaced heat supply units located below the solid surface support, each of the heat supply units being positioned so as to selectively heat a portion of the surface of the solid surface material to be fabricated, and the heat supply units being switchable on and off independently of other heat supply units.

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24. The fabrication station of claim 23, further comprising an air exhaust chamber connected to a source of air suction and a plurality of air exhaust vents spaced along the length of the fabrication station for drawing air from the vicinity of the solid surface material being fabricated into the air exhaust chamber, the air
25 exhaust vents being located above, but near the surface of the solid surface material to be fabricated.

25. The fabrication station of claim 23, further comprising a ventilation air intake chamber and a plurality air intake vents located above the air intake vents for discharging ventilation air from the ventilation air intake chamber; and wherein the air intake vents are located relative to the exhaust vents so as to create a
5 circulating air barrier between the face of a fabricator working on the solid surface material to be fabricated and the surface of the solid surface material to be fabricated.

26. The fabrication station of claim 23, further comprising an adjustable support that supports each slat support channel portion so that the position of the
10 slat support channel portions is adjustable relative to the support wall and one another to provide a fine adjustment.

27. The fabrication station of claim 23, further comprising removable slat portions of different sizes and shapes that can be supported within the slat support channel portion so that the supports are adjustable to accommodate different
15 shapes of solid surface material to fabricated.

28. The fabrication station of claim 27, wherein the removable slat portion has an angled upper surface.

29. The fabrication station of claim 27, wherein the removable slat portion includes a plurality of spaced holes.

20 30. The fabrication station of claim 27, wherein the removable slat portion includes a clamp.

31. The fabrication station of claim 27, wherein the removable slat portion includes a hook.

25 32. The fabrication station of claim 27, wherein the removable slat portion includes a longitudinal groove.

33. The fabrication station of claim 32, wherein the removable slat portion supports a longitudinal slat within the longitudinal groove.

34. The fabrication station of claim 23, further comprising a base from which the support wall extends and wheels connected to the base to allow the base 5 to roll.

35. The fabrication station according to claim 27, wherein the removable slat portion of the supports is made from a sacrificial material such that at least a portion of the solid surface material to be fabricated is supported on a support that can be cut with solid surface fabricating tools during the fabrication process without 10 damaging the tools.

36. The fabrication station of claim 23, further comprising a plurality of spaced-apart supports that extend from the support wall on each side of the support wall so as to provide fabrication stations on both sides of the support wall.

15 37. The fabrication station of claim 36, wherein the fabrication stations on each side of the support wall include a plurality of spaced heat supply units located below the solid surface support; an air exhaust chamber connected to a source of air suction; and ventilation air intake chamber.

20 38. The fabrication station of claim 37, wherein the air exhaust chambers communicate with one another and the ventilation air intake chambers communicate with one another.

25 39. The fabrication station of claim 23, further comprising a table saw mounted on a support that can be swung from a substantially horizontal position to a storage position.

40. The fabrication station of claim 24, wherein the air exhaust chambers comprise a plenum secured to the support wall.

41. The fabrication station of claim 40, further comprising utility connections prewired into the air exhaust plenum prior to attachment to the support wall.

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42. The fabrication station of claim 23, further comprising a timer switch for switching the heat supply units on and off independently of other heat supply units.

43. The fabrication station of claim 24, further comprising a photoelectric switch for selectively opening and closing the exhaust vents.

44. A method for fabricating solid surface material stock, comprising the steps of:

providing solid surface material stock at a worksite;

15 laying out dimensional information directly onto said solid surface material stock;

cutting and finishing said solid surface material stock according to said dimensional information laid out thereon, thereby obtaining a fabricated solid surface material portion; and

20 installing said fabricated solid surface material portion.

45. The method of claim 44, further comprising the step of maintaining the temperature of a section of the solid surface material at a temperature of 60°F - 75°F when adhesive is applied thereto.